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ABSTRACT

After a century of fairly steady decline, the official poverty rate among American children increased from 14.0% in 1969 to 19.6% in 1989, suggesting that the United States is losing the war on poverty. However, once various defects in the official poverty measure are corrected, it appears that the proportion of children in households with income below the poverty line probably fell between 1969 and 1989 or between 1967 and 1991. Data from the Consumer Expenditure Survey support this claim, and direct measures of material hardship also indicate that things have not been worsening for the low income family, although housing and neighborhood crimes remain serious concerns. The findings suggest that the official poverty statistics are not a reliable guide to poverty in America as most Americans understand the term. Five possible explanations are advanced: (1) official price indices somewhat overstate inflation; (2) children's households include more nonrelatives, whose income is not counted when the Census Bureau decides whether a child is poor; (3) the growth of Food Stamps and rent subsidies during the 1970s raised poor children's material standard of living without raising their income; (4) affluent families' flight from central cities to suburbs made a lot of relatively modern central-city housing available to low-income parents who would not otherwise have been able to afford it; and (5) households with low reported incomes may have had more unreported income in 1989 than in 1969. Despite the spread of single-parent families and the decline in the earning power of unskilled workers, child poverty, as defined by low income, low consumption, and material deprivation, has probably remained constant or fallen slightly since 1969. (Contains 8 tables, 1 figure, and 25 references.) (SLD)

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HAS POVERTY REALLY INCREASED AMONG CHILDREN SINCE 1970?

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HAS POVERTY REALLY INCREASED AMONG CHILDREN SINCE 1970?

by Susan E. Mayer and Christopher Jencks

Abstract

After a century of fairly steady decline, the official poverty rate among American children increased from 14.0 percent in 1969 to 19.6 percent in 1989, suggesting that the United States was losing its war on poverty. But once we correct various defects in the official poverty measure, our best estimate is that the proportion of children in households with incomes below the poverty line probably fell between 1969 and 1989 or between 1967 and 1991. Data from the Consumer Expenditure Survey also suggest that the value of the goods and services consumed by low-income households with children was about the same in the late 1980s as in the early 1970s.

Direct measures of material hardship tell an even more encouraging story. When we compare 1989-90 to 1969-73, children from low-income households were more likely to live in homes with complete plumbing, a modern sewage system, central heating, air conditioning, dishwashers, clothes dryers, and telephones. Low-income children also saw doctors more regularly. The main bad news was that low-income parents were less likely to own their home, less likely to live in single-family dwellings, and more likely to say that crime was a problem in their neighborhood.

These findings suggest that official poverty statistics are not a reliable guide to trends in poverty as most Americans understand the term. Likely explanations are that (1) official price indices somewhat overstate inflation; (2) children's households include more nonrelatives, whose income is not counted when the Census Bureau decides whether a child is poor; (3) the growth of Food Stamps and rent subsidies during the 1970s raised poor children's material standard of living without raising their income; (4) affluent families' flight from central cities to suburbs made a lot of relatively modern central-city housing available to low-income parents who would not otherwise have been able to afford it; and (5) households with low reported incomes may have had more unreported income in 1989 than in 1969.

HAS POVERTY REALLY INCREASED AMONG CHILDREN SINCE 1970?

by Susan E. Mayer and Christopher Jencks

The poverty rate for children under the age of eighteen fell steadily between 1939, when the Census Bureau first asked about family income, and 1969. After 1969 the official rate began to climb again. Comparing business cycle peaks, the official rate went from 14.0 percent in 1969 to 16.4 percent in 1979 and 19.6 percent in 1989. The recession that began in 1990 pushed child poverty up to 21.9 percent in 1992. If the pattern that prevailed during the 1970s and 1980s persists in the 1990s, economic recovery will eventually bring the 1992 rate down again, but not to its pre-recession level.

Statistics of this kinds have played an important part in recent policy debates. Conservatives cite them as evidence that "Great Society" programs were counter-productive, increasing poverty instead of reducing it. Liberals cite the same statistics as evidence that the government should expand social programs of the kind that conservatives want to cut. Rather than taking sides in this debate, we propose to challenge its premise. Instead of asking what caused the increase in child poverty or how it could be reversed, we ask whether it increased at all.

We consider three possible definitions of poverty: inadequate income, inadequate consumption, and material hardship. The first section of our paper looks at the proportion of children with incomes below the federal poverty line. It shows that once we allow for various potential sources of error in the way the Census Bureau calculates poverty rates, child poverty shows no clear trend between 1969 and 1989. Section 2 shows that poor parents' reported consumption fell less than their reported income between 1972 and 1990, and that their per capita consumption rose. Section 3 shows that when we look at direct measures of material welfare, children experienced far more gains than losses between 1969 and 1989.

1. INCOME AND POVERTY

The Census Bureau decides whether people are poor by comparing their family's total income to the official poverty threshold for a family of the relevant size and composition. Nearly every aspect of this procedure has been criticized at one time or another (Ruggles, 1990). In this section we focus on six problems that could create a discrepancy between changes in the official poverty rate and changes in the "true" rate, namely (1) errors in measuring the rate of inflation, (2) the use of family rather than household income to determine an individual's economic status, (3) setting the poverty threshold too low, (4) changes in the quality of the data, (5) changes in family size, and (6) the growth of means-tested noncash benefits.

Adjusting for inflation. The Office of Management and Budget adjusts the official federal poverty thresholds for inflation using the Consumer Price Index for urban families (CPI-U). All price indices, including the CPI-U, have a number of well-known problems. Most experts currently think that the CPI-U somewhat overstates inflation, but nobody can be sure. A recent review by the Congressional Budget Office suggested that the CPI-U currently overstates inflation by at least 0.5 points a year (Peterson, 1994). The Chairman of the Federal Reserve Board has suggested that the upward bias may be as great as 1.5 points (Starobin, 1995).

The Bureau of Labor Statistics (BLS), which prepares the CPI-U, eliminated one major source of upward bias in 1983. Before that, BLS had estimated changes in the net cost of owner-occupied housing from data on housing prices and mortgage interest rates. During periods of protracted inflation, such as the 1970s, prospective home buyers tend to bid up housing prices in anticipation of future capital gains. Lenders also demand higher interest rates to offset the declining value of their principal. As a result, the initial cost of home ownership rises faster than most other prices. Higher initial costs are, however, usually offset by above-average capital gains. Because the pre-1983 CPI-U did not take account of homeowners' capital

gains, it overstated increases in the net cost of home ownership during the 1970s.

Since 1983 BLS has estimated changes in the consumption value of owner-occupied housing from changes in rents for similar units. This approach makes the CPI-U consistent with the national income accounts and with the price indices used in other countries. BLS never made this reform retroactive, however, so the CPI-U still overstates inflation prior to 1983. Users who want a consistent series must use an alternative measure, the CPI-U-X1, which shows roughly what would have happened to the CPI-U if the 1983 reform had been implemented in 1967.

The Census Bureau publishes poverty estimates based on both the CPI-U and the CPI-U-X1. The first two rows of Table 1 compare the two series. They are the same in 1967. By 1991 the CPI-U-X1 rate is 1.8 points lower than the official CPI-U rate. In this paper we concentrate on the period from 1969 to 1989, so as to eliminate the effect of the business cycle. When we do that, replacing the CPI-U with the CPI-U-X1 cuts the estimated increase in child poverty from 5.6 to 4.0 points.

Both the CPI-U and the CPI-U-X1 track what urban consumers paid for the bundle of goods they bought in 1982-84. The Commerce Department's Bureau of Economic Analysis (BEA) produces a fixed-weight price index analogous to the CPI that tracks prices for all personal consumption expenditure (PCE). The version that best matches the CPI covers the mix of goods and services that consumers bought in 1982. Whereas the CPI-U-X1 rose 215 percent between 1969 and 1989, this PCE index rose only 208 percent (Council of Economic Advisors, 1991, p292). A more recent version of the fixed-weight PCE index tracks the prices of the goods and service that consumers bought in 1987. This index increases only 202 percent between 1969 and 1989 (Council of Economic Advisors, 1995, p280). As we shall see, adjusting the poverty thresholds for inflation with the 1987 PCE index rather than the CPI-U-X1 cuts the apparent increase in poverty by another 1.1 points.

All these inflation estimates are based on price indices that track the cost of the same bundle of goods and services over a protracted period. If some prices rise more than others, as they almost always do, consumers often substitute goods whose price has risen less than most for those whose price has risen more rapidly. If we allow for this bias, the estimated rate of inflation during the 1980s falls by about 0.2 points a year (Manser and MacDonald, 1988; Aizcorbe and Jackman, 1993; Schmidt, 1993).

The way BLS tracks prices also seems to exaggerate inflation. Before 1978, BLS generally tracked the same items in the same stores for about ten years, largely ignoring new items and new outlets. Since 1978 BLS has added new items in new locations every year. It selects these items by looking at what consumers are currently buying. This approach tends to oversample goods that are currently selling for less than their average long-run price. As a result, the price of items recently added to the BLS market basket tends to rise faster than other prices. Eliminating this "sample rotation bias" cut the increase in the CPI-U between 1992 and 1993 by about 0.3 points (Peterson, 1994). No one knows how large the bias was in earlier years.

Changes in the quality of goods and services can also lead to substantial bias in any price index. Technical innovation in medical care, for example, tends to drive up both prices and the effectiveness of treatment. BLS tracks changes in medical prices, but it does not try to estimate changes in the value of medical treatment to those who receive it. As a result, its medical price index records more inflation than it should. BLS has also tended to underestimate the value consumers assign to improvements in household appliances (Gordon, 1990).

Unmeasured quality changes have led BLS to underestimate the rate of inflation in other domains. Until 1988, for example, BLS ignored the fact that rental housing tended to deteriorate over time. As a result, it underestimated the increase

in rents for housing of constant quality (Lowry, 1982). BLS also treats automobile pollution control devices as a qualitative improvement. This makes sense if such devices have really improved the quality of the air that consumers breathe. But if these devices merely keep air quality from deteriorating, the CPI-U is underestimating the cost of maintaining a fixed standard of living.

These observations lead us to three general conclusions about poverty. First, because of the way the CPI-U treated the costs of home ownership, official poverty statistics overstate the increase in poverty prior to 1983. Second, while the net effect of the remaining biases in the CPI-U (and in the other price indices published by the federal government) is probably to exaggerate inflation, we cannot be sure of this and we certainly cannot estimate the magnitude of the bias. Third, since an income-based poverty measure can never be any better than the price index it embodies, all such measures have a significant margin of error. That makes it important to check conclusions derived from income-based measures against direct measures of material well-being.

The remainder of this paper relies largely on the CPI-U-X1 to adjust for inflation. We do this not because we think the CPI-U-X1 is the best available measure of inflation, but because it is less favorable to our general argument than the various PCE indices.

Household versus Family Income. The Census Bureau defines people as poor on the basis of their family income, not their household income. In order to constitute a family, individuals must not only live in the same household but must be related to one another by blood, marriage, or adoption. When the Census Bureau counts the poor, therefore, it treats nonrelatives as if they lived in separate households, no matter what their actual economic relationship is. If a single mother lives with her boyfriend, for example, her children's poverty status depends entirely on her income, even if he pays most of the bills. Likewise, if a seventeen year old

lives with three roommates, she is poor if her income falls below the poverty threshold for an "unrelated individual" ($7,299 in 1992 dollars). The same rule applies to each of her roommates, so her household's total income must be $29,196 for all its members to avoid poverty. If the same woman lives with two older sisters and a cousin, she is part of a four-person family and her household needs only $14,708 (in 1992 dollars) to avoid poverty. Kinship thus cuts her household's estimated needs in half.

The Census Bureau adopted these conventions in the 1940s, when few unmarried couples lived together and even those that did often told the world they were married. At that time, moreover, many affluent families still hired live-in servants, and many poorer families took in lodgers. In such a world it made sense to assume that when nonrelatives had different incomes they were likely to have different living standards, even if they lived in the same household. Today live-in servants are rare, "lodgers" have mostly become "roommates," and unmarried couples are everywhere. As a result, nonrelatives who live in the same household usually have roughly the same standard of living.[1] Thus if our goal is to measure a child's current material standard of living, we should probably treat poverty as an attribute of households, not families.

A psychologist might object to this approach on the grounds that living with nonrelatives often has significant psychological costs. This is true, but the same argument often applies to living with one's extended family. If children are living with either their extended kin or nonrelatives solely because their parents cannot afford a place of their own, a psychological case can be made for considering the children poor no matter how high their material standard of living is. Thus if our main concern were with children's mental health, we might want to concentrate on trends in parental income, ignoring the income of other household members.[2] In this paper, however, our main concern is material rather than psychological

deprivation. We therefore make households rather than nuclear families our basic unit of analysis.

Line 3 of Table 1 shows the child poverty rate when we compare children's total household income in 1992 CPI-U-X1 dollars to the poverty threshold for units of the relevant size.[3] Using this approach, children's poverty rate rises from 15.1 percent in 1969 to 16.5 percent in 1989 -- an increase of 1.4 points.

High versus Low Thresholds. When the Census Bureau uses the CPI-U-X1 to adjust for inflation, it starts with the official 1967 poverty thresholds and inflates them using the CPI-U-X1. By 1983 these CPI-U-X1 thresholds are 8 percent lower than the official thresholds. The CPI-U and the CPI-U-X1 are identical after 1983, so this 8 percent differential persists in all subsequent years. Opinion surveys suggest, however, that the public thinks today's official thresholds are too low, not too high (O'Hare et al, 1990). Thus if our goal is to measure what the public thinks of as poverty, using the CPI-U-X1 to lower the current thresholds is a move in the wrong direction. A better solution is to start with today's official thresholds and deflate them with the CPI-U-X1, creating new thresholds for earlier years. This is equivalent to raising the Census Bureau's CPI-U-X1 thresholds by 8 percent in all years.

If the distribution of income had remained constant, raising the poverty line by 8 percent would have roughly comparable effects on the poverty rate in all years. But the distribution of income has not been stable. Households in the bottom quintile reported lower real incomes in 1989 than in 1969, while those in the middle quintile registered modest gains (see Table 2). Poverty therefore increases more when we set the thresholds very low than when we set them higher. Comparing lines 3 and 4 of Table 1, for example, we can see that when we raise the poverty line by 8 percent in all years the apparent increase in child poverty between 1969 and 1989 falls from 1.4 to 1.1 points. Raising the line 25 percent to make it roughly consistent

with opinion surveys would almost eliminate the apparent increase in child poverty. Without a parallel change in labeling, however, this revision could be quite misleading, because it would conceal the apparent "deepening" of poverty near the bottom of the distribution.

Note, too, that if we start with the current poverty thresholds, focus on household income, and use the 1987 PCE price index instead of the CPI-U-X1 to deflate today's thresholds, child poverty does not increase at all between 1969 and 1989 (see line 5).

Data Quality. The Census Bureau's annual poverty statistics come from the March Current Population Survey (CPS). Compared to the decennial Census, the CPS misses about 5 percent of all children under the age of fourteen and 14 percent of adult men between the ages of twenty and thirty-nine. Among blacks, the CPS misses 8 percent of children and 33 percent of men between the ages of twenty and thirty-nine (US Bureau of the Census, 1993a, Table B-2). Since even the decennial Census misses a fair number of people, the overall undercount is even greater than these estimates imply.

If the decennial Census yields more complete household rosters than the CPS, poverty statistics derived from the Census could be more accurate than those derived from the CPS. But the CPS also uses face-to-face interviews, while the Census relies largely on mailback questionnaires. Perhaps for this reason, the Census finds more households with both very high and very low incomes than the CPS does (Mayer and Jencks, 1993). These differences between the Census and the CPS also lead to different trends in child poverty. Comparing 1989 to 1969 and deflating today's official thresholds with the CPI-U-X1, child poverty rises by 1.1 points in the CPS but falls by 1.2 points in the Census (compare lines 4 and 6 of Table 1). We cannot say which estimate is more accurate.

Rows 7 and 8 show the percentages of poor children with household incomes

above and below half the poverty line. If poverty levels were largely traceable to market forces, we would expect moderate and extreme poverty to rise and fall in tandem. That is not what the Census shows. Extreme poverty appears to have risen between 1969 and 1989, while moderate poverty declined.

The apparent growth of extreme poverty may be real, but it could also be a byproduct of less complete income reporting. For a single mother with two children, half the poverty line was $471 a month in 1992. To the best of our knowledge no one has ever constructed a realistic budget showing how a family of three could live on such a sum. It is true that most states set welfare benefits for a family of three below $471 a month in 1992, but budget studies show that welfare recipients hardly ever live on their benefits alone (Edin, 1994; Edin and Jencks, 1992). Almost without exception they need additional cash from off-the-books jobs, under-the-table payments from the absent father of their children, their current boyfriend, or their kin. If welfare recipients cannot survive on $471 a month even when they get Food Stamps and Medicaid, we doubt that many non-recipients can do so. We therefore suspect that most households reporting incomes less than half the poverty line also had unreported income, savings, or unusually large amounts of noncash income, such as free rent or free meals.

Changes in Household Size. The mean size of poor children's households fell from 6.4 individuals in 1970 to 4.9 in 1990. The poverty threshold for the average child fell by 19 percent as a result. In theory, this reduction in the poverty threshold meant that children with incomes near the poverty line had the same standard of living in 1990 as in 1970. But the equivalence scale built into the poverty line rests on very weak theoretical and empirical foundations.[4] In practice, therefore, poor children in today's smaller families could be either better or worse off than poor children in yesterday's larger families.

There is no consensus about how we should decide when a small family is as

poor as a large one.[5] Elsewhere we have suggested that families of different sizes should be considered equally poor when they report the same number of material hardships (Mayer and Jencks, 1989). Applying this standard to a sample of Chicago-area households, we found that doubling household size almost doubled the amount of income that a low-income household needed to hold its hardship level constant. If we take this at face value, the average child's poverty threshold should have fallen 23 percent between 1969 and 1989, not 19 percent. That would have cut the 1989 poverty rate by about one point.

Many economists prefer a different approach to deciding when families of different sizes are equally well-off. Since families buy more luxuries and fewer necessities as their income rises, economists often assume that families of different sizes are equally well off when they buy the same mix of goods and services. Both Lazear and Michael (1980) and van der Gaag and Smolensky (1981) have derived equivalence scales using this approach. These scales suggest that cutting household size by 23 percent should reduce the poverty threshold by less than 19 percent. The "LM-vS" approach implies that poverty grew more (or fell less) than the official thresholds imply.

Because household size has different effects on different outcomes, no equivalence scale can be correct for all purposes. But everyone agrees that a family of four needs more money than a family of two, and nobody claims that a family of four needs more than twice as much as a family of two. Thus if we track both total and per capita income over time and find that children near the bottom of both distributions have lost ground, we can feel reasonably confident that child poverty has risen. If those near the bottom have less total income but more income per capita, we must be cautious.

Table 2 shows how both total and per capita household income changed between 1969 and 1989. For children in the bottom quintile, total household

income (deflated with the CPI-U-X1) fell by 15 percent in the Census and 25 percent in the CPS. Per capita household income fell 4.4 percent in the CPS and rose 1.2 percent in the Census. If per capita income is the best predictor of material hardship, as Mayer and Jencks found, Table 2 implies that we should not expect much change between 1969 and 1989 in the incidence of hardship among children. If consumption of luxuries is linked to an equivalence scale that lies midway between per capita and total household income, as LM-vS suggest, the bottom quintile probably spent less of its income on luxuries in 1989 than in 1969.

Noncash benefits. Tables 1 and 2 ignore noncash benefits such as Food Stamps, Medicaid, and low-income housing subsidies. The Census Bureau did not ask people whether they got such benefits until 1979. The Bureau estimates that noncash programs reduced the overall poverty rate by 2.1 points in 1989 compared to 2.3 points in 1979 (US Bureau of the Census, 1993b, p. xix). The reduction was about twice as large for children in 1989. We do not have comparable figures for children in 1979, but we can see no reason to think that the effect of noncash benefits changed more for children than for adults.

Ignoring noncash benefits poses a more serious problem when we try to estimate trends in child poverty before 1979. Food Stamps did not become a major program until 1972, and they were not available in every state until 1975. Means-tested rent subsidies also became more widely available in the late 1970s.[6] Counting Food Stamps and rent subsidies as cash would therefore push more children above the poverty line in 1979 than in 1969. Our best guess is that taking these benefits into account during the 1970s would cut the apparent growth in child poverty (or increase its apparent decline) by about two percentage points.

Conclusions about income poverty. Official estimates of trends in child poverty are clearly subject to a wide margin of error. Even if one sets aside calculations based on the pre-1983 CPI-U, one could argue that child poverty

increased by about four percentage points between 1969 and 1989, that it declined by four points, or that it did not change at all. The Census Bureau's CPI-U-X1 series rises by about four points. But suppose we assume that:

1) Household income is a better resource measure than family income.
2) The 1992 poverty thresholds come closer to the public's current conception of poverty than the 1967 thresholds.
3) The true trend in poverty falls midway between the trends found in the CPS and the Census.

On these assumptions child poverty remained constant between 1969 and 1989 (see rows 4 and 6 of Table 1). In the CPS, child poverty also remains constant between 1967 and 1991, even though 1967 was widely viewed as a "good" year while 1991 was widely viewed as a "bad" year.

Now consider the three most plausible modifications of these assumptions:

1) Allowing for the growth of food stamps and rent subsidies during the 1970s would probably lead to a two point decline in child poverty between 1969 and 1989.
2) Replacing the CPI-U-X1 with the 1987 PCE index cut child poverty by another percentage point between 1969 and 1989.
3) Raising the official poverty thresholds by 25 percent to make them consistent with public opinion data would probably add another point to the decline.

2. CONSUMPTION

BLS conducted a nationwide Consumer Expenditure Survey (CEX) in 1972-73, in 1980-81, and continuously after 1984. The CEX includes four quarterly interviews that ask households about their expenditures over the past three months.

The final interview also asks about income over the past twelve months. The CEX does not follow families that move, so we can only match income with expenditures if households remain at the same address for twelve months. As a result, our CEX samples are not quite comparable to the CPS and Census samples discussed in the previous section.[7]

Just as in the CPS and the Census, about a third of all CEX households have some missing income data. In the CPS and the Census, the Census Bureau replaces missing values with the amount reported by the last previous household that had similar demographic and social characteristics. Because the CEX is so small, it is often hard to find good matches for households with missing data, so BLS has traditionally just assumed that missing amounts were zero. Because the original 1972-73 data have been destroyed, there is now no way of distinguishing missing data from true zeros in those years. BLS does, however, include a flag indicating that about ten percent of all households failed to report their major source of income. We eliminated these households from all our samples.[8] In the 1980s, roughly a quarter of those who reported their major source of income failed to report how much they got from some other source, such as interest, dividends, or part-time self-employment. To maintain consistency with the 1972-73 data, we retained these households and kept missing values at zero. (We also tried excluding these households. This had almost no effect on our findings.)

The top panel of Table 3 shows trends in household income for children in the bottom, middle, and top quintiles of the CEX distribution. We treat food stamps as income. For this and other reasons the bottom quintile reports slightly more income in the CEX than in the CPS. But the downward trend between the early 1970s and the late 1980s is as marked in the CEX as in the CPS.

The middle panel of Table 3 shows the estimated value of households' consumption in different years. To estimate consumption we start with a

household's reported cash expenditures and then:

1. Add the value of food stamps.[9]
2. Subtract gifts, interest payments, pension contributions, federal income taxes, and cash investments.[10]
3. Replace homeowners' expenditures for purchasing, maintaining, or improving their residence with the home's estimated rental value.[11]
4. Replace amounts spent buying motor vehicles with the estimated annual depreciation of all the vehicles the household owned at the time of the survey.[12]

This measure of consumption is not ideal, but it comes closer to capturing people's current standard of living than their current income does.

For households in the lowest income quintile, mean consumption always exceeds mean income by at least 40 percent.[13] In part, this is because household income fluctuates from year to year. Most households want to "smooth" their consumption, so they save in good years and either draw down their savings or borrow in bad years. Current consumption therefore depends on long-term ("permanent") income as well as current income. If a household's current income falls in the bottom quintile, its permanent income -- and hence its potential consumption -- tends to exceed its current income.

To measure the potential magnitude of low-income parents' unmeasured resources, we turned to the Panel Study of Income Dynamics (PSID), which has been following the members of roughly 5000 households since 1968. We first classified PSID children by their household's total income during the current year (Y_1). We then calculated each household's mean income for the five years prior to the survey (Y_5). In the absence of measurement error, the ratio of Y_5 to Y_1 presumably sets a rough upper bound on the ratio of current consumption to current

income (C_1/Y_1). Figure 1 shows trends in both Y_5/Y_1 (taken from the PSID) and C_1/Y_1 (taken from the CEX) for children whose current household income put them in the bottom fifth of the distribution. The two ratios are quite similar in 1972-73 and 1980-81. After 1981 the ratio of consumption to income rises dramatically. The ratio of five-year income to current income does not rise.[14] These findings suggest that increased income volatility does not account for the rising ratio of consumption to income in the CEX.

We also examined several other possible explanations for the high ratio of consumption to income in the middle and late 1980s, including changes in the incidence of the federal income tax, changes in home ownership, changes in the timing of automobile purchases, and the growth of food stamps. None played a major role. That leaves increases in unreported income as the most likely suspect.

Because the ratio of consumption to income rose, changes in annual income are not a reliable guide to changes in consumption, at least in the CEX. Using the CPI-U-X1 to adjust for inflation, the mean income of the bottom quintile fell 26 percent between 1972-73 and 1988-90, but mean consumption fell only 8.4 percent. When we rank households by per capita income, the mean for the bottom quintile falls 14.5 percent. Yet these households' mean per capita consumption rises 3.7 percent.

3. LIVING CONDITIONS

This section examines three aspects of children's living conditions: housing conditions, consumer durables, and doctor visits. We selected these areas because the Census Bureau had collected reasonably consistent data on them since the early 1970s. These data come from the decennial Census, the CEX, the American Housing Survey (AHS), and the Health Interview Survey (HIS). The AHS was conducted annually between 1973 and 1981 and biennially after that. We use the

three surveys conducted in 1973-75 plus the surveys conducted in odd-numbered years from 1975 to 1989. The HIS has been conducted annually since the 1950s. We use the 1970, 1980, 1982, and 1989 surveys.

Housing Conditions. We divide housing conditions into five categories: amenities built into the housing stock, maintenance levels, crowding, type of structure, and neighborhood conditions. We also look at home ownership. (Ownership does not tell us much about children's housing conditions, but it does tell us something about economic security.)

Table 4 shows the percentage of children living in homes that were built without what we call modern amenities: a modern sewage system, complete plumbing or a complete bathroom, electrical outlets in every room, and central heat.[15] All these amenities became more common between the early 1970s and the late 1980s, especially for children whose household income fell in the bottom two deciles.[16] This change reflects the ongoing modernization of America's housing stock. Almost all housing put up in the United States since 1945 has had these amenities. Indeed, most buildings put up since 1920 have had them. As older buildings are torn down, these amenities become increasingly commonplace.

If there had been no building code and if affluent families had all wanted to stay in the central city, low-income families might have been pushed into new suburban slums that lacked these amenities. In such a world landlords might have kept building the same kind of shelter for the poor that they built a century ago, with common bathrooms at the end of the hall and kerosene stoves rather than central heat. But because affluent urban families kept moving to the suburbs, central-city housing designed for these families kept filtering down to the poor. This housing had private bathrooms, electrical outlets, and central heat. When it trickled down to the poor, landlords seldom removed the bathrooms, the wiring, or the heating system, even though they might not have installed such things if they had been

starting from scratch. By 1990, a significant minority of low-income children even lived in buildings with central air conditioning (see Table 4).

Table 5 shows various measures of maintenance levels. Among children in the bottom two income deciles, there is no clear trend. On the negative side, low-income children were slightly more likely to live in housing with badly cracked walls and ceilings in 1989 than in 1973. Their parents were also slightly more likely to report rats and mice in 1983 than in 1973, but because the question changed after 1983 we cannot be sure this trend continued. On the positive side, low-income children were slightly less likely to have holes in their floors and considerably less likely to have leaky roofs. Their chances of having exposed electric wiring hardly changed at all.

Table 5 also shows that low-income children were less likely to live in what the Census Bureau calls crowded conditions (more than one person per room). Crowding declined because households got smaller, not because they moved to larger housing units. But if low-income parents had less real income, as Table 2 implies, we would have expected them to hold down their expenses by living in even smaller units. That did happen in some cases, but crowding declined too.

Better housing conditions had a price. The decennial Census and the AHS both show that low-income tenants' rent rose faster than any standard price index between 1970 and 1990 (Jencks, 1994). If tenants spent more in real terms, we should not be surprised to discover that they got more in return. The puzzle is how they managed to pay for it. Their reported incomes certainly did not keep pace with their rents. Most analysts therefore assume that low-income tenants must have cut back their spending in other areas. The CEX suggests, however, that low-income tenants were spending more on almost everything. This was possible because, as we saw in table 3, low-income households' total expenditures rose faster than their total income. Indeed, the CEX suggests that rent and utilities claimed a declining

fraction of low-income tenants' total spending (28 percent in 1988-90 compared to 32 percent in 1972-73; see Jencks, 1994, p142).

If real rents were rising and housing conditions were improving, how are we to explain the nearly universal belief that low-income families' housing conditions deteriorated between 1970 and 1990? Table 6 provides a partial answer. First, low-income parents were less likely to live in single family dwellings, which have traditionally been part of the American dream. Second, low-income parents were less likely to own their homes. Third, low-income parents were more likely to describe crime as a neighborhood "problem" in 1985 than in earlier years. All these changes were associated with a geographic shift: more low-income families lived in central cities, and fewer live in suburban and rural areas. But while urbanization may have led to worse social conditions, it did not lead to worse housing. Quite the contrary.

Consumer Goods. Only 8.9 percent of all children lived in a household without a motor vehicle in 1990, compared to 9.9 percent in 1970. But while parents in general were slightly more likely to have a motor vehicle, this was not true for those in the lowest income decile (see Table 7). Notice, however, that while the proportion of very low-income parents with no vehicle rose slightly, the proportion with two vehicles rose even more. That means some low-income households were living better than in the past (two cars), while others were living worse (no car). This finding again suggests that income reporting may have deteriorated. If more households with two cars were underreporting their income, not only would the proportion of the bottom decile with two cars rise, but the cutoff point for membership in the bottom decile would fall. That would push a disproportionate number of one-car families into the second income decile, leaving behind those who really could not afford a car and those who were too cagey to report their income fully.

Increases in unreported income could also explain another puzzle in Table 7. A majority of low-income parents owned an automatic clothes washer in 1972-73, but few had either a clothes dryer or a dishwasher. By the late 1980s, the proportion of low-income parents who reported owning a clothes washer had declined. Declining ownership of clothes washers is also found among more affluent households and may be linked to the spread of multi-family dwellings, which often provide a common laundry room. Notice, however, that the proportion of low-income parents who reported owning a clothes dryer and a dishwasher rose. These conflicting trends suggest that the bottom income quintile was becoming more economically heterogeneous.

Telephone service spread among low-income children during the 1970s but became less common in the 1980s. These trends probably reflect price changes. During the 1970s state regulatory agencies refused to let the price of local service rise as fast as most other prices. As the political climate became more conservative, regulatory agencies became less concerned with ensuring that all households could afford service. After the Justice Department broke up AT&T, regulators allowed local carriers to raise both the initial charge for turning on a telephone and the security deposit, so service became less affordable. Nonetheless, more low-income children's homes had telephones in 1990 than in 1970.

Doctor Visits. Most pediatricians believe that children should have a medical checkup at least once a year, especially when they are young. One widely used measure of children's access to care is therefore the proportion of all children who have seen a doctor within the past year. Table 8 shows a dramatic decline between 1970 and 1980 in the percentage of children who had gone more than a year without a doctor visit. The decline was especially marked among those in the bottom income quintile. The same pattern recurs when one looks at the total number of visits children had made during the previous year (data not shown). The

HIS questionnaire changed between 1980 and 1982, so changes during this interval may well be methodological artifacts. There is no consistent trend from 1982 through 1989.

How are we to explain increases in doctor visits during the 1970s? Unlike the price of telephone service, the price of medical services rose faster than the bottom quintile's reported income during these years.[17] The proportion of low-income children receiving public assistance -- and hence Medicaid -- was slightly higher in 1980 than in 1970 (Committee on Ways and Means, 1994, p399), but this change was not large enough to account for the entire increase in doctor visits. Even if we assume some growth in unreported income, low-income parents' ability to pay for doctor visits probably fell. But as we noted earlier, medical care was also somewhat more likely to make children better in 1989 than in 1970, so its value may have risen as fast as its relative price. The fact that parents had more education may also have made them more inclined to seek professional advice of all varieties.

Parents were also somewhat more likely to say that their children had been sick during 1989 than during 1970. But sickness was not a strong predictor of doctor visits in either year, and the increase in visits was far larger than one would predict based on the increase in reported sickness (Mayer, 1991).

The travel time required to see a doctor may also have fallen in poor communities. Before 1965, when Medicaid was created, few doctors could afford to set up practice in very poor areas. After 1965, both nonprofit clinics and private "Medicaid mills" became more common. These institutions continued to spread during the 1970s, perhaps reducing the distance a poor parent had to travel for routine checkups or treatment. Local clinics and private physicians who depended on Medicaid may also seen patients more promptly than the big city hospitals where the poor traditionally got care.

CONCLUSIONS

Our principal findings are that:

1. Estimated trends in child poverty are quite sensitive to the choice of a price index, the treatment of nonrelatives' income, and the inclusion of noncash benefits. When we compare children's household income to the official 1992 poverty thresholds and adjust for inflation using the fixed-weight price index for all personal consumption expenditures in 1987, child poverty hardly changes between 1969 and 1989 or between 1967 and 1991.
2. Using any standard price index, the poorest fifth of America's children experienced a substantial decline in total household income between 1969 and 1989, but little or no decline in per capita household income.
3. For children in the bottom fifth of the income distribution, total consumption fell less than total income. Per capita consumption actually rose a bit between 1972-73 and 1988-90.
4. The material conditions of life among low-income children mostly either improved or remained unchanged between 1970 and 1990.

The most likely explanations for these findings are that:

1. The most widely used price indices probably overstate the rate of inflation between 1969 and 1989.
2. As affluent households moved to the suburbs, a growing stock of relatively modern central-city housing became available to the poor.
3. Households in the bottom income quintile got somewhat more noncash benefits in 1990 than in 1970.
4. Households in the bottom income quintile probably had more

unreported income in 1989 than in 1969, although the evidence for this is all indirect and is certainly not conclusive.

At least for children, therefore, the oft-repeated claim that America lost the war on poverty appears to be exaggerated. Despite the spread of single-parent families and the decline in unskilled workers' earning power, child poverty as most people understand the term -- low income, low consumption, and material deprivation -- probably remained constant or fell slightly between 1969 and 1989. Looking back over the past quarter century, the worst one can say is that the war on poverty ended in stalemate. If we focus on children's material standard of living, victories outnumber defeats.

FOOTNOTES

1. But see footnote 7.

2. While a time series on child poverty that treated the nuclear family as the basic unit of analysis would be instructive, we cannot construct such a series before 1983, because earlier Census surveys did not always identify the parent(s) of children if they lived in extended families headed by someone other than one of their parents.

3. Lines 3 through 7 of Table 1 also simplify the official thresholds in two ways. First, since OMB eliminated distinctions between farm and nonfarm families and between families headed by men and women in 1980, we did the same for earlier years. Second, we used the same threshold for all families of a given size rather than letting the threshold vary with the proportion of household members who were under the age of eighteen as the official thresholds do. If the official thresholds simply assumed that children's expenses were lower than adults' expenses, we would have retained distinctions based on age. But the official thresholds do not embody any consistent theory about the relative needs of children and adults. For families of four, for example, the 1992 thresholds were as follows: $14,471 for four adults, $14,708 for three adults and one child, $14,228 for two adults and two children, and $14,277 for one adult and three children. No consistent theory about the relative needs of children and adults would produce this pattern. The patterns found among larger and smaller families are equally inconsistent. Eliminating age-related differences has almost no effect on poverty counts, because the differences are so small.

We should also note that we have been unable to reproduce the exact child poverty rates in Census publications from the public use data files. Even using the poverty flags on the public use data files, we find slightly less growth in child poverty than the Bureau reports. We are still investigating this puzzle.

4. Like the rest of the poverty line, the equivalence scale comes from Orshansky (1965). For families of three or more Orshansky set the poverty line at three times the US Department of Agriculture's "emergency" food budget for a family of the relevant size and composition. Because there are some economies of scale in food consumption and because children eat less than adults, the size elasticity of the poverty thresholds for families with three to eight members averages 0.77 (estimated from data in US Bureau of the Census, 1993a, Table A). Orshansky felt that extending this approach to smaller families would make their thresholds unrealistically low, so she raised the thresholds for families of one and two. The size elasticity of the thresholds for families of three or less averages 0.40.

The resulting thresholds for 1992 (T_{92}) can be estimated quite accurately ($R^2 = .998$) from the formula $T_{92} = \$6812 + \$2466(N)$, where N is the number of additional family members beyond the first. Each additional family member thus costs roughly a third of what the first member cost.

5. Lazear and Michael (1988) and Betson (1990) review various possible answers to this question.

6. Medicaid coverage of children also grew slightly during the 1970s. The program was established in 1965, and all welfare recipients were eligible from the start, but the percentage of poor children getting welfare was slightly higher in 1979 than in 1969 (Committee on Ways and Means, 1994, p399).

7. The CEX also differs from the Census and the CPS in that its basic unit of analysis is the "consumer unit" rather than the family or the household. Consumer units are composed of individuals who live in the same household and are either (a) related to one another by blood, marriage, or adoption, or (b) pool resources to purchase at least two of the three categories of goods and services that the CEX uses to define a consumer unit, namely food, housing, and "other expenses." Only two percent of all households contain more than one consumer unit, so we use the terms "household" and "consumer unit" interchangeably in the text.

8. We used weights calculated by John Sabelhaus to make this sample demographically similar to the full CEX.

9. Because of data limitations, our consumption measure does not include the value of rent subsidies or health insurance subsidies.

10. We use Sabelhaus's estimate of federal income tax payments, since he reports that the values given on the public use data tapes systematically understate federal tax liability in the 1980s. We could not estimate state income or sales taxes.

11. For owner-occupied housing we use Sabelhaus's estimate of the home's rental value, which is based on the owner's estimate of the home's market value multiplied by the ratio of aggregate rental value to aggregate market value for all owner-occupied housing in the relevant year. The numerator of this ratio came from the National Income Accounts. The denominator came from the Flow of Funds accounts.

12. We estimated vehicle depreciation from a regression equation that predicted a consumer unit's outlays for motor vehicles from the number of vehicles owned and the value of the other goods and services consumed in the relevant year. (Consumption of other goods and services predicted vehicle expenditures better than income did.) Using predicted rather than observed outlays smooths year-to-year fluctuations in vehicle owners' purchases without altering the mean for any given category of consumers. In principle, we should have done the same thing with other durable goods, but the required data were not available in most years.

13. If we divide the bottom quintile into two deciles, trends are broadly similar in both deciles but more extreme in the bottom decile. The ratio of consumption to income in the bottom decile rises from 1.84 in 1972-73 to 4.37 in 1984-86 and then slips back to 2.39 in 1988-90. Households in the bottom decile report about half as much income as those in the second decile, but the two groups' consumption only differs by about 20 percent. From 1984 through 1988 the bottom income decile actually consumes more than the second decile. This pattern strongly suggests that some of the households in the bottom income decile are misclassified because of reporting errors.

14. When we regress Y_5/Y_1 on the year in which we observe Y_1, the ratio rises by an average of 0.010 per year, but the standard error is 0.007. Y_1 covers 1973 through 1988 (the last income year available when we did these estimates), and Y_5 covers 1968 through 1987. The estimates exclude households formed within five years of the survey year.

15. The Census definition of "complete" plumbing became slightly more restrictive over time, so Table 4 understates the true improvement. The AHS variable ("complete bathroom") is more restrictive than the Census variable ("complete plumbing"), because it requires bathroom plumbing to be in a single room.

16. Tables 4 through 7 array households by total income, not per capita income. Roughly half the measures of material welfare in these tables are more strongly correlated with total income than with per capita income. The opposite pattern holds for the other half. This pattern does not change over time. Trends in material well-being for children in the bottom decile of the per capita distribution are similar to those shown here.

17. The CPI-U price index for medical services rose by a factor of almost five between 1969 and 1989, while the per capita household income of children in the bottom quintile rose by a factor of three.

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Table 1

Alternative Poverty Rates for Children under Eighteen: 1959-1991

Method	1959	1967	1969	1979	1989	1991	Change: 1969-89
Published estimates using CPS family income and official 1967 thresholds							
1. CPI-U	27.3	16.6	14.0	16.4	19.6	21.8	5.6
2. CPI-U-X1		16.6	13.8	15.0	17.8	20.0	4.0
Estimates from public use files using household income[1]							
March CPS							
3. 1967 thresholds inflated with CPI-U-XI		17.6	15.1	14.9	16.5	18.3	1.4
4. 1992 thresholds deflated with CPI-U-X1		20.1	17.1	16.6	18.2	20.2	1.1
5. 1992 thesholds deflated with 1987 PCE		21.8	18.1	16.7	18.1	20.1	0.0
Decennial Census							
6. 1992 thresholds deflated with CPI-U-X1	29.3		18.3	16.2	17.1		-1.2
7. Less than 50 percent of threshold	12.4		7.0	6.6	7.7		.7
8. 50 to 100 percent of threshold	16.9		11.3	9.6	9.4		-1.9
Percent of children in March CPS with a nonrelative in the household							
8. Any nonrelative		1.3	1.4	3.1	5.6	6.4	4.2
9. Nonrelative who provides more than 10 percent of household income		.8	.7	2.3	4.2	5.0	3.5

1. Poverty thresholds are weighted averages for all families of a given size, regardless of the children's age, taken from US Bureau of the Census (1993a). Thresholds do not vary by farm status or head's sex.

SOURCES: Published data are from US Bureau of the Census (1993a, Table 3, and 1993b, Table I-2). The published 1959 estimate comes from the 1960 Census, not the 1960 CPS. The public use data files were compiled by Robb Mare, David Rhodes, and Christopher Winship. Dave Knutson did the tabulations from these files. Estimates cover all children except those living in institutions.

SOURCE: KNUTSON, Cenpov.fam and cenpov.hhd 11-7-94 (Weighted by kids).

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Table 2
Total and Per Capita Household Income of Children under Eighteen
(in 1992 CPI-U-X1 Dollars) in the Census and CPS,
by Income Quintile: 1969-1989

Sample and year	Total Household Income			Per Capita Household Income		
	Bottom Quintile	Middle Quintile	Top Quintile	Bottom Quintile	Middle Quintile	Top Quintile
Census						
1969	10,869	34,878	80,998	2,356	7,249	16,013
1979	9,978	37,883	88,724	2,511	8,712	19,372
1989	9,230	38,265	101,460	2,385	9,128	23,233
CPS						
1969	12,481	34,715	73,945	2,205	6,752	15,666
1979	10,500	37,377	81,349	2,255	8,298	18,833
1989	9,331	37,207	91,611	2,107	8,623	22,399
Percent Change: 1969-89						
Census	-15.1	9.7	25.3	1.2	25.9	45.1
CPS	-25.2	8.2	22.3	-4.4	27.7	43.0

SOURCE: Tabulations by David Knutson from public use files. Means for the top quintile are biased downward due to top-coding. Quintiles are computed separately for total and per capita income.

SOURCE: KNUTSON, CPSCPI.LST,10-5-94/CENCPI.LST,10-2-94; Households weighted by kids.
1992 CPI-U-X1 dollars.

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Table 3
Income and Consumption for Consumer Units with Children under Eighteen, in 1992 CPI-U-X1 Dollars, by CEX Income Quintile: 1972-1990

	Income Quintile			Per Capita Income Quintile		
	Bottom	Middle	Top	Bottom	Middle	Top
Income						
1972-73	13,254	38,452	81,953	2,722	8,119	18,545
1980-81	10,765	35,279	68,002	2,570	7,966	17,374
1984-86	8,350	33,500	82,153	1,980	7,841	21,078
1986-88	8,163	34,303	79,560	1,970	8,076	20,612
1988-90	9,822	34,563	84,013	2,327	8,260	21,487
Percent change						
1972-90	-26.0	-10.1	2.5	-14.5	1.7	15.9
Consumption						
1972-73	18,491	30,848	51,131	3,825	6,606	11,582
1980-81	16,192	30,920	47,151	3,785	7,231	11,865
1984-86	19,696	29,946	53,835	4,478	6,787	13,641
1986-88	15,494	29,542	51,535	3,691	7,119	13,284
1988-90	16,939	29,789	55,684	3,967	7,341	14,244
Percent change						
1972-90	-8.4	-3.4	8.9	3.7	11.1	23.0
Consumption as a percent of income						
1972-73	140	80	62	141	81	62
1980-81	150	88	69	147	91	68
1984-86	236	89	66	226	87	65
1986-88	190	86	65	187	88	64
1988-90	173	86	66	170	89	66

SOURCE: Tabulations by Scott Winship. Sample includes all consumer units reporting at least one major income source and twelve months of expenditure data, weighted to be demographically representative of the US. The unweighted N's are 8,108 in 1972-73, 1,103 in 1980-81, 1,938 in 1984-86, 2,528 in 1986-88, and 2,972 in 1988-90. Means for the top quintile are biased downward due to top-coding, especially in 1980-81.

SOURCE: WINSHIP, 70T3-9CI.LIS, 80T8-9CI.LIS, 80T3-8SC.LIS. Households weighted by kids. CPI-U-X1 prices.

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Table 4
Percent of Children in Housing that Lacked Modern Amenities, by Income Level and Year

Measure and year	Income decile		Income quintile			
	First	Second	Second	Third	Fourth	Fifth
No sewer or septic system						
1973-75	8.1	5.1	2.1	.6	.3	.1
1977-79	4.9	3.0	1.5	.6	.2	.1
1981-83	2.7	1.9	.9	.3	.1	0
1985-89	1.7	.9	.2	.1	0	0
Change	-6.4	-4.2	-1.9	-.5	-.3	-.1
Incomplete bathroom[1]						
1973-75	11.4	7.5	3.2	.9	.4	.3
1977-79	7.4	4.6	2.5	1.1	.4	.2
1981-83	6.1	4.1	2.2	1.0	.4	.2
1985-89	2.5	2.2	.8	.7	.6	.6
Change	-8.9	-5.3	-2.4	-.2	.2	.3
Incomplete plumbing[2]						
1970	20.5	15.5	6.6	2.4	1.9	.6
1980	5.5	4.1	1.9	.9	.5	.1
1990	3.2	1.3	.9	.5	.4	.3
Change	-17.3	-14.2	-5.7	-1.9	-1.5	-.3
No electric outlet in one or more rooms						
1973-75	12.1	10.0	5.9	3.5	2.6	1.9
1977-79	8.4	6.7	5.0	2.8	1.6	1.4
1981-83	9.3	6.6	4.7	3.1	2.2	1.6
1985-89	6.0	6.0	3.8	2.4	2.0	1.1
Change	-6.1	-4.0	-2.1	-1.1	-.6	-.8
No central heat						
1973-75	46.2	42.9	30.3	18.7	12.3	6.8
1977-79	39.3	40.2	28.6	18.8	12.3	6.1
1981-83	35.7	38.1	31.9	22.2	14.7	9.1
1985-89	32.3	34.7	28.1	21.4	14.9	9.6
Change	-13.9	-8.2	-2.2	2.7	2.6	2.8
No central air conditioning						
1973-75	92.1	92.1	87.8	83.6	76.4	66.1
1977-79	88.8	89.2	83.1	77.5	69.5	57.9
1981-83	85.6	86.0	81.1	73.3	64.3	52.1
1985-89	83.3	80.4	74.6	65.6	57.2	47.2
Change	8.8	11.7	13.2	18.0	19.2	18.9
Built before 1940[3]						
1970	43.7	45.1	39.8	34.3	29.0	25.6
1990	18.9	16.3	17.8	16.8	15.6	12.7
Change	-24.8	-28.8	-22.0	-17.5	-13.4	-12.9

Notes on next page.

(WEIGHTED BY KIDS); Source: Knutson, Newtb55.kid, 9-27-94; Veenstra, Kidwtqnt.lst, 9-29-94

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NOTES FOR TABLE 4:

1. Complete plumbing located in a single room within the unit.
2. Hot and cold water, sink, toilet, and shower or tub for the exclusive use of household members. Plumbing facilities need not be in respondent's apartment in 1970, but must be in the building.
3. Not available for 1980.

SOURCES: Measures for 1970-1990 are from the decennial Census (tabulations by David Knutson). Measures for 1973-1989 are from the AHS (tabulations by Tim Veenstra). In the Census, the bottom decile includes between 2,700 and 3,500 households. In the AHS it includes 7,638 households in 1973-75, 5,033 in 1977-79, 4,424 in 1981-83, and 4,027 in 1985-89. The AHS income classification is based on the income of the primary family, not the entire household.

Table 5
Percent of Children in Homes with Maintenance or Crowding Problems, by Income Level and Year

Measure and year	Income decile		Income quintile			
	First	Second	Second	Third	Fourth	Fifth
Open cracks in wall or ceiling						
1973-75	17.9	14.3	8.9	5.6	3.8	2.8
1977-79	18.5	14.4	9.4	5.0	3.5	2.5
1981-83	19.2	16.2	10.5	5.4	3.7	2.6
1985-89	19.9	15.9	10.6	6.3	4.2	3.2
Change	2.0	1.6	1.7	.7	.4	.4
Holes in floor						
1973-75	8.2	5.6	2.9	1.8	.8	.6
1977-79	8.2	5.5	3.7	1.5	1.0	.6
1981-83	8.9	7.3	4.2	1.6	.8	.6
1985-89	7.0	5.8	2.6	1.4	.8	.6
Change	-1.2	.2	-.3	-.4	0	0
Leaky roof						
1973-75	16.5	14.2	9.9	7.2	5.7	5.3
1977-79	14.5	13.5	10.3	7.1	5.6	4.9
1981-83	14.9	12.8	9.9	7.0	6.0	4.9
1985-89	11.9	12.5	10.1	8.5	7.7	7.3
Change	-4.6	-1.7	.2	1.3	2.0	2.0
Exposed wiring						
1973-75	5.2	5.9	4.8	4.0	3.1	2.7
1977-79	5.6	3.6	3.9	3.5	2.4	.9
1981-83	6.4	5.9	5.2	3.7	3.2	3.0
1985-89	4.9	4.5	3.1	1.8	1.6	1.0
Change	-.3	-1.4	-1.7	-2.2	-1.5	-1.7
Rats or mice[1]						
1973-75	29.2	25.8	17.8	13.2	10.4	9.6
1977-79	31.9	26.5	21.1	17.0	14.0	13.1
1981-83	30.8	27.8	22.0	15.6	13.9	11.4
Rats only						
1985-89	19.1	15.6	8.7	5.1	3.3	2.7
More than one person per room						
1970	40.0	43.3	34.9	26.3	23.5	16.7
1980	26.1	27.5	20.4	14.5	11.1	8.5
1990	27.1	26.9	21.1	14.8	11.1	7.3
Change:	-12.9	-16.4	-13.8	-11.5	-12.4	-9.4

1. Respondent's judgment. Question changed in 1985.

SOURCE: Measures for 1970-1990 are from the decennial Census. Measures from 1973-1989 are from the AHS. For details see Table 4.

Source: Knutson, Newtb55.kid, 9-27-94; Veenstra, Kidwtqnt.lst, 9-29-94. Wtd by kids.

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Table 6
Percent of Children in Housing with Selected Characteristics,
by Income Level and Year

Measure and year	Income decile		Income quintile			
	First	Second	Second	Third	Fourth	Fifth
Rental unit						
1970	63.8	57.3	42.9	27.4	18.6	12.1
1980	66.8	59.4	41.7	22.9	14.7	8.1
1990	77.0	66.8	48.7	32.1	19.6	10.8
Change	13.2	9.5	5.8	4.7	1.0	-1.3
Single family dwelling						
1973-75	63.4	67.0	74.0	82.5	87.9	92.4
1977-79	55.5	63.0	73.1	84.0	89.4	94.4
1981-83	55.5	59.0	71.3	82.2	89.4	94.3
1985-89	48.0	54.1	65.8	78.1	87.9	93.1
Change	-15.4	-12.9	-8.2	-4.4	0	.7
Parents report crime is a problem in neighborhood						
1973-75	18.9	19.1	17.1	16.5	16.4	16.6
1977-79	18.9	16.0	15.4	14.4	13.3	13.5
1981-83	19.1	18.7	15.8	14.4	14.4	14.5
1985[1]	26.3	19.6	17.0	14.1	13.3	11.8
Change:	7.4	.5	-.1	-2.4	-3.1	-4.8

1. Question changed in 1987.

SOURCES: See Table 4.

(WEIGHTED BY KIDS); Source: Knutson, Newtb55.kid, 9-27-94; Veenstra, Kidwtqnt.lst, 9-29-94

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Table 7
Percent of Children in Households with Selected Consumer Durables, by Income Level and Year

Measure and year	Income decile First	Second	Income quintile Second	Third	Fourth	Fifth
At least one motor vehicle						
1970	59.8	76.4	90.4	95.6	97.6	98.8
1980	58.6	78.1	89.7	95.7	97.7	98.4
1990	57.3	82.1	91.7	97.0	98.0	99.0
Change	-2.5	5.7	.7	1.4	.4	.2
Two or more vehicles						
1970	13.2	20.0	32.3	44.4	57.6	74.8
1980	14.2	21.0	35.3	50.7	64.7	76.6
1990	17.3	34.3	56.4	75.3	86.6	92.9
Change	4.1	14.3	24.1	30.9	29.0	18.1
Air conditioner						
1973-75	27.5	31.8	41.1	48.9	55.2	62.2
1977-79	30.9	33.6	45.2	53.1	58.3	65.1
1981-83	36.6	39.6	49.1	57.3	63.7	69.2
1985-89	41.5	47.4	57.9	64.9	69.7	72.8
Change	14.0	15.6	16.8	16.0	14.5	10.6
Clothes washer						
1972-73	62.8	72.8	84.2	91.5	95.3	96.3
1984-89	57.8	61.4	78.6	84.4	92.8	97.1
Change	-5.0	-11.4	-5.6	-7.1	-2.5	.8
Clothes dryer						
1972-73	23.3	38.3	59.6	73.9	83.1	91.0
1984-89	37.5	38.0	62.0	75.2	88.9	94.6
Change	14.2	-.3	2.4	1.3	5.8	3.6
Dishwasher						
1972-73	9.1	10.1	18.0	31.0	45.5	68.7
1984-89	16.5	16.0	25.8	41.6	58.2	79.7
Change	7.4	5.9	7.8	10.6	12.7	11.0
Telephone						
1970	60.8	66.9	83.0	91.7	95.0	98.5
1980	72.1	80.2	88.7	95.8	98.3	99.0
1990	68.7	79.7	90.8	96.5	98.3	99.5
Change	7.9	12.8	7.8	4.8	3.3	1.0

SOURCE: Measures for 1970-1990 are from the decennial Census. Measures from 1973-1989 are from the AHS. Measures for 1972-1989 are from the CEX. For details see Tables 3 and 4.

WEIGHTED BY KIDS; Sources: Knutson, Newtb55.kid, 9-27-94; Veenstra, Kidwtqnt.lst, 9-29-94; Levine-Winship runs stored as \CEX.TAB\70T3-8CI.CEX and \80T3-5SC.CEX, 10-12-94.

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Table 8
Percent of Children Who Had Not Visited a Doctor in the Past Year, by Income Level: 1970 to 1989

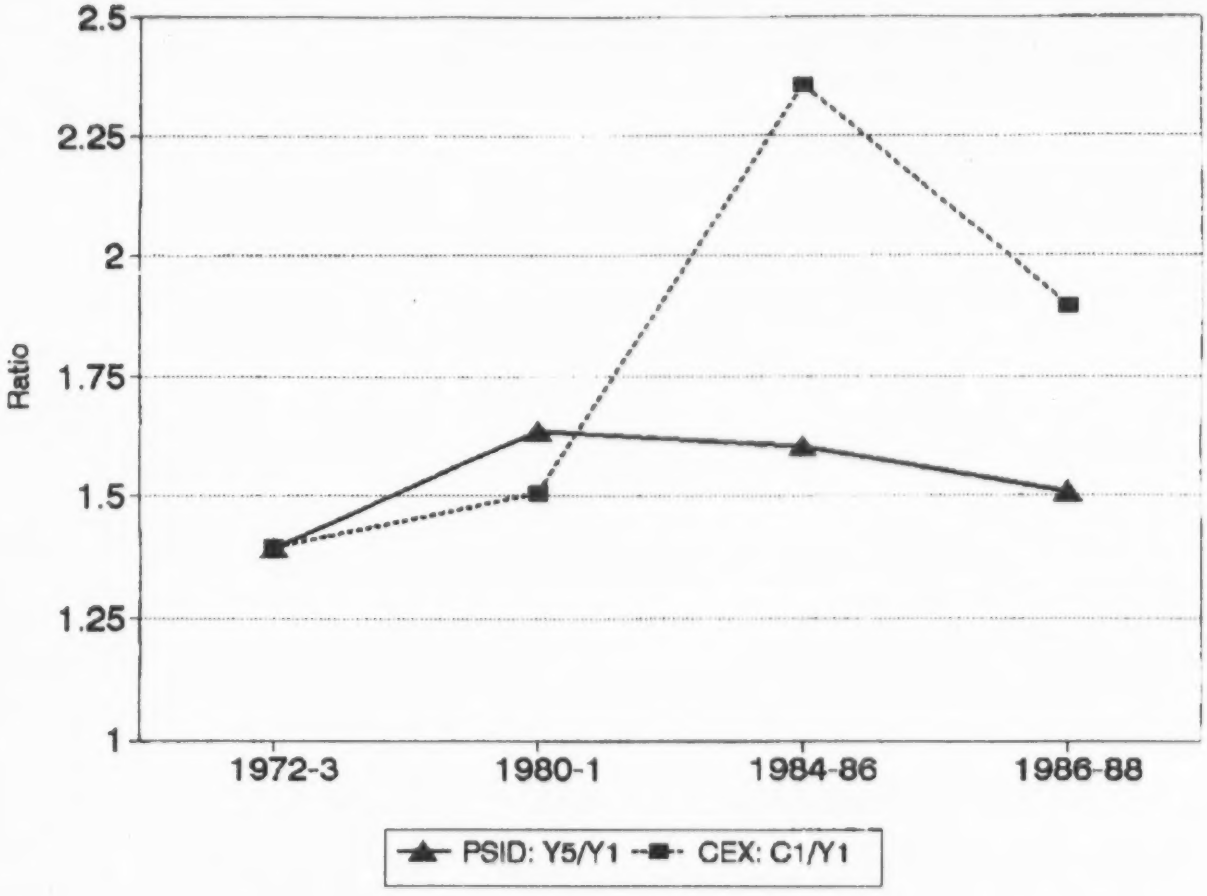
Age and year	Income decile		Income quintile			
	First	Second	Second	Third	Fourth	Fifth
Under seven						
1970	27.0	25.9	19.2	15.9	11.4	9.4
1980	12.1	11.7	11.8	10.2	10.4	7.2
1982	15.1	13.7	16.0	11.8	9.9	8.4
1989	13.7	14.9	13.8	10.4	7.7	5.3
Seven to seventeen						
1970	45.1	45.0	41.5	36.9	32.4	25.7
1980	31.1	34.3	33.3	30.8	26.3	26.0
1982	31.2	33.9	35.3	32.3	27.1	23.0
1989	31.2	32.0	31.3	27.3	23.9	17.5

SOURCE: Health Interview Survey public use data tapes (tabulations by David Knutson). HIS sample sizes range from 10,000 to 14,000 for children under seven and from 16,000 to 25,000 for children aged 7 to 17.

Source: Knutson, \HISDEC2.LST: 10-12-94

Figure 1

Ratio of Five-Year to One-Year Income in the PSID and One-Year Consumption to One-Year Income in the CEX for Children in the Bottom Income Quintile during the Current Year: 1972-1988



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